Biological Evaluation:
The Potential Effects of the Proposed Reissuance of the NPDES General Permit for New and Existing Sources in the Oil and Gas Extraction Point Source Category for the Territorial Seas Offshore of Texas

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Summary

This biological evaluation accounts for the direct, indirect, and cumulative effects of the proposed reissuance of the National Pollutant Discharge Elimination System (NPDES) permit on Federally-listed threatened and endangered species. According to the "Federally Listed as Threatened and Endangered Species of Texas" list found at the Fish and Wild Service (FWS) Region 2 website (http://www.fws.gov/southwest/es/EndangeredSpecies/lists/) and the national Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) website (http://www.nmfs.noaa.gov/pr/species/esa/, the following threatened and endangered species have been reported to exist in the Territorial Seas offshore of Texas:

Whales:
Northern right (*Eubalaena glacialis*)
Blue (*Balaenoptera musculus*)
Finback (*Balaenoptera physalus*)
Sei (*Balaenoptera borealis*)
Humpback (*Megaptera novaeangliae*)
Sperm (*Physeter macrocephalus*)

Turtles:
Kemps ridley (*Lepidochelys kempii*)
Loggerhead (*Caretta caretta*)
Leatherback (*Dermochelys coriacea*)
Hawksbill (*Eretmochelys imbricata*)
Green (*Chelonia mydas*)

Fish:
Gulf Sturgeon (*Acipenser oxyrinchus desotoi*)

Birds
Brown Pelican (*Pelecanus occidentalis*)[1]
Bald Eagle (*Haliaeetus leucocephalus*)[2]
Piping Plover (*Charadrius melodus*)

Mammals
West Indian Manatee (*Trichechus manatus*)

EPA Region 6 has determined that reissuance of this general permit may affect but is not likely to adversely affect the following listed species: the northern right whale (*Eubalaena glacialis*), the blue whale (*Balaenoptera musculus*), the finback whale (*Balaenoptera physalus*), the sei whale (*Balaenoptera borealis*) humpback whale (*Megaptera novaeangliae*) sperm whale

[1] Delisted by the U.S. fish and Wildlife Service (USFWS) from the federal endangered species list on December 17, 2009
[2] Delisted by the U.S. Fish and Wildlife Service (USFWS) from the federal endangered species list on August 9, 2007

(*Physeter macrocephalus*), Kemps ridley turtle (*Lepidochelys kempii*), loggerhead turtle (*Caretta caretta*), leatherback turtle (*Dermochelys coriacea*), hawksbill turtle (*Eretmochelys imbricata*), and the green turtle (*Chelonia mydas*).

A Separate "No Effect Memo" has been also prepared to address the "No Effect" determination for the Gulf Sturgeon (*Acipenser oxyrinchus desotoi*), the Brown Pelican (*Pelecanus occidentalis*), the Bald Eagle (*Haliaeetus leucocephalus*), the Piping Plover (*Charadrius melodus*), and the West Indian Manatee (*Trichechus manatus*). The Gulf sturgeon have not been documented in Texas and therefore the effects of the proposed action on Gulf sturgeon are not considered further in this consultation. The main factors affecting the populations of the Brown Pelican and Piping Plover along the Gulf coast are insecticides, nest disturbance, and habitat loss. Activities associated with oil and gas operations in the territorial seas are not expected to contribute to those factors. Bald eagles and Brown Pelican were delisted by the U.S. Fish and Wildlife Service (USFWS) from the federal endangered species list on August 9, 2007 and December 17, 2009, respectively. West Indian Manatee are not expected to be present near offshore platforms or other oil and gas extraction structures.

EPA Region 6, in the Biological Evaluation (BE) dated October 29, 2002, determined that reissuance of the permit may affect but is not likely to adversely affect those species. EPA Region 6 sent a letter dated November 17, 2003, to the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), respectively, requesting section 7 consultation pursuant to the Endangered Species Act of 1973 (ESA). The FWS concurred with EPA's determination and issued a "no effect finding" on January 5, 2004 (Conc. # 2-11-04-I-0051). The National Marine Fisheries Service (NMFS) concurred with EPA's determination of no adverse impact to essential fish habitat (EFH) in the Territory Seas of Texas on a letter dated November 25, 2003, and NMFS further sent an concurrence letter (Ref: I/SER/2003/01506) dated June 20, 2005, stated that "the proposed action will not likely adversely affect listed species under NMFS' purview."

On or about April 20, 2010, a Transocean's Deepwater Horizon offshore drilling rig contract to BP Exploration & Production Inc. (BP) exploded and fired causing a significant oil spill on leased block Mississippi Canyon 252, about 50 miles off southeast coast of Louisiana. Discharges due to BP's normal exploration, development, and production activities in lease block Mississippi Canyon 252 are regulated under EPA's general permit for offshore oil and gas extraction GMG290000. However, discharges due to accidents, such as oil spills or unexpected discharges caused by fire or explosion are not authorized by the general permit. Although it is possible that this spill may eventually affect the ambient water quality on the territorial seas off Texas, how the spill may change the environmental baseline and how long the impact will last are uncertain. To date no effects have been documented in the area of the Texas Territorial Seas General Permit. In order to assess the potential future impact caused by the spill, this draft permit renewal proposes to include ambient water monitoring and produced water characteristics study programs, so EPA may further evaluate the effects of this authorization of discharges in the future.

EPA has also incorporated more protective permit requirements to this permit, including

the addition of cooling water intake structure requirements (40 CFR 125 subpart N) into this general permit in order to minimize fish/shellfish impingement mortality and entrainment caused by the intake structures.

Because no new species have been added to the federal endangered and threatened species list in the action area and more stringent requirements (e.g, ambient water monitoring that will allow evaluation of water quality against water quality standards) have been included in this permit reissuance, EPA Region 6 has determined that reissuance of this general permit may affect but is not likely to adversely affect on the following listed species: northern right whale (*Eubalaena glacialis*), blue whale (*Balaenoptera musculus*), finback whale (*Balaenoptera physalus*), sei whale (*Balaenoptera borealis*), humpback whale (*Megaptera novaeangliae*), sperm whale (*Physeter macrocephalus*), Kemps ridley turtle (*Lepidochelys kempii*), loggerhead turtle (*Caretta caretta*), leatherback turtle (*Dermochelys coriacea*), hawksbill turtle (*Eretmochelys imbricata*), and green turtle (*Chelonia mydas*).

Proposed Action

The NPDES general permit for New and Existing Sources in the Oil and Gas Extraction Point Source Category for the Territorial Seas Offshore of Texas (Permit no. TXG260000), hereafter referred to as the Texas Territorial Seas General Permit, is proposed to be reissued. Discharges covered by the permit would be primary gas rather than crude oil exploration and production.

Action Area

Discharges from oil and gas extraction facilities located in the territorial seas offshore of Texas are proposed to be authorized by the permit. The territorial seas are defined in Clean Water Act section 502 (8) as "the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles". The water depth in that area ranges from zero meters to approximately thirty meters. In addition, discharges to the territorial seas from oil and gas extraction facilities located in close proximity to the three-mile limit are proposed to be authorized.

Description of Federally Listed Threatened and Endangered Species

Northern Right Whale (Eubalaena glacialis)

In 2008, NMFS listed the endangered northern right whale (*Eubalaena spp.)* as two separate, endangered species: the North Pacific right whale (*E. japonica*) and North Atlantic

right whale (*E. glacialis*). The northern right whale is a medium sized baleen whale with a length up to 55 feet and weight up to 140,000 pounds. Diet consists mainly of copepods and juvenile euphausiids (krill). Northern right whales generally have been observed from Greenland to the coast of Florida in the north Atlantic. They generally spend the spring, summer, and fall off the coast of New England and Canada and migrate farther south during the winter months. However, some whales remain in the north throughout the winter. Areas where the species tends to concentrate most often include: coastal Georgia and Florida, the Great South Channel east of Cape Code, Cape Cod Bay and Massachusettes Bay, the Bay of Fundy, and Browns and Baccaro Banks south of Nova Scotia. The northern right whale is thought to exist in the Gulf of Mexico; although, there have been only two sightings since 1900. One of those sightings was off the coast of Florida, and the other sighting was a calf stranding on the Texas Coast. The main reason for decline of this species is historic hunting. Existing human impacts to this species include: collisions with ships, entrapment or entanglement in fishing gear and habitat destruction such as dredging or sewer discharges.

It is unknown to what extent the oil and gas activities may disturb or otherwise affect right whales. It appears that whale behavior and the type of activity in which they are engaged influence right whale sensitivity to, and tendency to avoid, noise disturbance and vessel activity, but more studies are needed. The third priority of the NMFS 2005 Recovery Strategy is to include 1) studies on the effects of potential anthropogenic mortality (such as coastal development, anthropogenic noise, pollutants, whale watching, and potential oil and gas exploration) and, if these are found to be threats, ensure that they are addressed; and 2) genetic studies to assess population structure and diversity. The proposed ambient water monitoring activities included in the permit will complement the 2005 Recovery Strategy in terms of assessment of pollutants near the offshore oil and gas extraction facilities.

Most known right whale nursery areas are in shallow, coastal waters. The International Whaling Commission has identified four categories of right whale habitats:

1. Feeding - areas with copepod and krill densities that routinely elicit feeding behavior and are visited seasonally
2. Calving - areas routinely used for calving and neonatal nursing
3. Nursery - aggregation area(s) where nursing females feed and suckle
4. Breeding - locations where mating behavior leading to conception occurs; breeding areas are not known for any population

Blue Whale (Balaenoptera musculus)

The blue whale is the largest of the whales and, in the North Atlantic, can grow to 89 feet in length and weigh nearly 300,000 pounds. Krill is the main food of this species. They range from the subtropics to Baffin Bay and the Greenland Sea, but are rarely seen in continental shelf waters along the eastern coast of the United States. Blue whales have been known to occasionally stray into the Gulf of Mexico. The historic decline in this species is thought to be the result of hunting, which has since ceased. On-going human impacts include: collisions with

ships, disturbance by vessels, entrapment and entanglement in fishing gear, acoustic and chemical pollution, and military operations. Blue whales generally have lower levels of contaminants than odontocetes. However, nothing is known about the effects of pollutants on blue whales.

At least some of the areas used by North Atlantic blue whales (e.g., the St. Lawrence River and Gulf) have been degraded by acoustic and chemical pollution. However, no specific evidence is available to describe or quantify the impacts of this degradation on the blue whale population.

Finback Whale (Balaenoptera physalus)

Within the U.S., the finback whale is listed as endangered throughout its range under the Endangered Species Act of 1973 and is listed as "depleted" throughout its range under the Marine Mammal Protection Act of 1972. The finback whale is the second largest whale species, growing to more than 75 feet in length and 150,000 pounds. This species is found throughout the North Atlantic from the Gulf of Mexico northward to the edges of the polar ice cap and tend to occur over the continental shelf and slope in greater than 650 feet of water. They are usually found in deep, offshore waters, primarily in temperate to polar latitudes, and less commonly in the tropics. Finback whales are thought to migrate seasonally and feed in more northerly latitudes while fasting in southerly latitudes. Their diet consists of krill, capelin, herring, and sand lance. Like the other endangered whale species, the reason for decline of the finback whale is historic hunting. Existing human impacts include: collisions with ships, disturbance of vessels, entrapment and entanglement in fishing gear, habitat degradation, and military operations. Presently, hunting in the North Atlantic only occurs in Greenland. Under the International Whaling Commission's aboriginal subsistent whaling authorization, 20 are allowed to be taken each year.

Although possible effects of pollution in the ocean environment on finback whales remain poorly understood, published evidence indicates that the finback whale body burdens of most contaminants (e.g., organochlorines and heavy metals) are lower than those of many toothed-whale species. Schooling fish constitute a large proportion of the finback whale's diet in many areas of the North Atlantic. Thus, trends in fish populations, whether driven by fishery operations, human-caused environmental deterioration, or natural processes, may strongly affect the size and distribution of finback whale populations.

Finback whales are migratory, moving seasonally into and out of high-latitude feeding areas, but the overall migration pattern is complex, and specific routes have not been documented.

Key elements of the proposed recovery program (June 2006 Draft Recovery Plan) for this species are 1) continued effective international regulation of whaling , 2) identifying and minimizing human-caused injury and mortality, 3) determining population structure and discreteness, and 4) estimating population sizes and monitoring trends in abundance.

Oil spills that occur while finback whales are present could result in skin contact with the oil, baleen fouling, ingestion of oil, respiratory distress from hydrocarbon vapors, contaminated food sources, and displacement from feeding areas. Actual impacts would depend on the extent and duration of contact, and the characteristics (age) of the oil. Most likely, the effects of oil would be irritation to the respiratory membranes and absorption of hydrocarbons into the bloodstream . If a marine mammal was present in the immediate area of fresh oil, it is possible that it could inhale enough vapors to affect its health. Inhalation of petroleum vapors can cause pneumonia in humans and animals, due to large amounts of foreign material (vapors) entering the lungs (Lipscomb et al. 1994). The proposed permit will contain more stringent technology based limits and will include new monitoring requirements to protect water quality for oil and grease and other priority pollutants. A limit of "No Free Oil" is proposed for miscellaneous discharges, such as non-contact cooling water and ballast water, and on deck drainage discharges. In addition, produced water discharges are limited for oil and grease, 7-day chronic toxicity, and 24-hour acute end-of-pipe toxicity.

In recent years, many Liquefied Natural Gas (LNG) facilities have been proposed worldwide. The noise generated from construction and operation activities from those facilities could affect marine mammals located within the vicinity of the project site. In addition, any increase in vessel traffic resulting from construction or operation of an LNG facility could negatively impact marine mammals migrating through the area.

Sei Whale (Balaenoptera borealis)

In the western North Atlantic, sei whales are known to occur from western Greenland to the southeastern United States. Like other whales, they tend to spend the summer in the northern latitudes and winter farther south. They tend to prefer deep water and can be found over the continental slope, basins between banks, and submarine canyons. Sei whales do not normally enter semi-enclosed waters such as the Gulf of Mexico or the Gulf of Saint Lawrence. However, there are recorded strandings along the northern coast of the Gulf of Mexico. Their preferred food consists of calanoid copepods and krill. Major human impacts to the species include: collisions with ships, disturbance from vessels, entrapment and entanglement in fishing gear, and military operations.

Humpback whale (Megaptera novaeangliae)

The humpback whale grows in length up to 59 feet and can weigh up 97,000 pounds. Diet of the humpback whale consists of krill, other large zooplankton, and small schooling fish. This species is known to occur in all ocean basins worldwide and it generally inhabits areas over the continental shelves, their slopes, and near some oceanic islands. Humpback whales are migratory, summering in higher latitudes (35 to 65 degrees) and wintering in tropical or temporate latitudes (10 to 23 degrees). Feeding is thought to mainly occur in the more productive summer range. They are not thought to normally inhabit the Gulf of Mexico. The only known observations in the Gulf were off the Cuban coast in 1918 and Tampa Bay in 1962 and 1989. Historic hunting led to the decline of the species. Existing causes of human impact are: entrapment and entanglement in fishing gear, collisions with ships, and acoustic disturbance

from ships, and aircraft.

In August, 2009, the National Marine Fisheries Service (NMFS) announces a status review of the humpback whale (*Megaptera novaeangliae*) under the Endangered Species Act of 1973 (ESA). A status review is a periodic undertaking conducted to ensure that the listing classification of a species is accurate.

Sperm whale (Physeter macrocephalus)

The sperm whale, largest of the toothed whales, averages 62 feet in length and can weigh as much as 120,000 pounds. They feed on large deep water squid and a variety of fish. This species occurs throughout most of the oceans from the tropics to the polar ice caps. Sperm whales generally occupy deep waters and are rarely seen over the continental shelf. Like the other whale species, historic hunting resulted in their decline. Existing human impacts are: entrapment and entanglement in fishing gear, collisions with ships, and acoustic disturbance from ships, and aircraft. The effects of oil and gas exploration and other industrial activities are unknown, but are believed to represent a relatively low level of threat to the current abundance of sperm whales.

At present, because of their general offshore distribution, sperm whales are less likely to be impacted by humans, and those impacts that do occur are less likely to be recorded. There has been no complete analysis and reporting of existing data on this topic.

Kemp's Ridley Turtle (Lepidochelys kempii)

The Kemp's ridley is one of the smallest sea turtles. Adult turtles are generally less than 99 pounds with a straight carapace of approximately 2.1 feet in length. They are thought to be shallow water benthic feeders and mainly eat crabs. Kemp's ridley turtles are known to range as far north as New England during the summer months. In the Gulf of Mexico, the species is found mainly in coastal areas. Hunting of both turtles and eggs contributed to the decline of this species. Existing threats include: development and human encroachment of nesting beaches, erosion of beaches, vehicular traffic on beaches, fisheries, oil spills, floating debris, dredging, and explosive removal of old oil and gas platforms.

Data on the impacts of oil on nesting female Kemp's ridleys are lacking. Nesting females could crawl through oil on beaches, thereby coating skin and shell or they may avoid oiled beaches (Milton *et al.* 2003). Females could potentially be prevented from accessing nesting beaches by containment booms or other barriers used in spill response activities.

According to the NMFS *March 2010 Revised Recovery Plan*, Kemp's ridleys are known to associate with oil and gas production platforms, particularly those in the shallow waters of the continental shelf where they feed and migrate. Studies to better document the presence of Kemp's ridleys near oil and gas production facilities and liquid natural gas terminals, particularly

in nearshore waters, are needed to better assess potential impacts and to inform efforts to reduce identified impacts. In addition, research to determine the impact of anti-biofouling agents used in liquid natural gas operations on Kemp's ridleys and their prey is also needed.

Loggerhead Turtle (Caretta caretta)

Adult loggerhead turtles average 249 pounds in weight and 3 feet in straight carapace length. They tend to inhabit the continental shelf and estuaries in a range from Newfoundland to Argentina and concentrate nesting in the temperate zones and sub-tropics. Significant nesting assemblages in a United States occur along the Georgia, North Carolina, and South Carolina coasts and along the Gulf coast of Florida. Foraging areas for adult loggerheads include the Gulf of Mexico. Their diet generally consists of gastropod and pelecypod molluscs and decapod crustaceans. Post hatchlings also consume macro-plankton and *Sargassum.* Threats include: beach erosion, beach armoring, artificial lighting, mechanical beach cleaning, recreational beach equipment and vehicles, non-native vegetation, poaching, dredging, pollution, marina and dock development, oil spills, oil development on live bottoms that disrupt or smother foraging grounds with sediments and drilling fluids, oil and tar discharged during pumping of bilges, underwater explosions, fisheries, ingestion of marine debris, and boat collisions.

Marine pollution, including marine debris, oil spills, and bioaccumulative chemicals, is one of the main anthropogenic threats to sea turtles. Because of their habitat and feeding behavior, loggerheads appear to be one of two sea turtle species that ingest more debris in all of its life stages. Direct or indirect disposal of anthropogenic waste introduces potentially lethal materials into loggerhead foraging habitats or into convergence zones, affecting oceanic juveniles. Loggerheads will ingest plastic pieces, styrofoam pieces, and other marine debris. Ingestion occurs when debris is mistaken for or associated with prey items. The proposed permit includes a "No floating solids or foam" requirement which is intended to protect water quality and reduce the discharge of toxic pollutants to the marine environment.

The impacts of offshore lighted oil production platforms on loggerheads are unknown. Lighted platforms may attract hatchlings, making them more susceptible to predation. Neritic juveniles and adults may be attracted by high prey concentrations around the structures, making them more susceptible to ingestion of petroleum products. Natural factors that have the potential to affect loggerhead recovery include the effects of aperiodic hurricanes, seasonal typhoons, and catastrophic environmental events such as tsunamis. In general, these events are episodic and, although they may affect loggerhead hatchling production, the results are generally localized and they rarely result in whole-scale losses over multiple nesting seasons.

Oil exploration and development on live bottom areas may disrupt foraging grounds by smothering benthic organisms with sediments and drilling muds. The effects of benthic habitat alteration on loggerhead prey abundance and distribution, and the effects of these potential changes on loggerhead populations, have not been determined but are of concern. Climate change also may result in trophic changes, thus impacting loggerhead prey abundance and/or distribution.

It is extremely difficult to predict the extent to which benthos may be affected for any discharge authorized by the proposed permit. Discharges will be required to meet all State Water Standards including whole effluent toxicity.

Leatherback Turtle (Dermochelys coriacea)

The leatherback turtle is the largest turtle species with adults generally weighing 450 to 1530 pounds and having a carapace length of 4.5 to 6 feet. There have been few sightings of Leatherback turtles in the Gulf of Mexico. Although little information is available, the diet of this turtle is thought to mainly consist of jellyfish. Existing threats to this species include: commercial shrimping, oil spills, and boat collisions.

NMFS initially designated critical habitat in 1998; NMFS designated critical habitat for leatherback turtles to include the coastal waters adjacent to Sandy Point, St. Croix, U.S. Virgin Islands. In 2007, NMFS received a petition to revise the critical habitat designation. NMFS published a 90-day finding on the petition in December 2007. In 2009, NMFS proposed to revise the critical habitat to include areas off of the U.S. west coast.

Hawksbill Turtle (Eretmochelys imbricata)

The hawksbill is a medium sized turtle averaging approximately 2.8 feet in curved carapace length with a weight of approximately 176 pounds. This species can occur near all of the states on the Gulf of Mexico, and is sighted most often in Florida and Texas. Critical habitat was designated in 1998 in coastal waters surrounding Mona and Monito Islands, Puerto Rico. Seventy seven sightings were reported along the Texas coast from 1972 to 1984. Nesting in the continental United States only occurs in southeastern Florida and the Florida Keys. Sponges are the principle diet of hawksbill turtles. Threats to this species include: poaching, oil spills, vessel anchoring and groundings, artificial lighting at nesting sites, mechanical beach cleaning, increased human presence, beach vehicular driving, entanglement at sea, ingestion of marine debris, commercial and recreational fisheries, water craft collisions, sedimentation and siltation, and agricultural and industrial pollution.

Hawksbills are associated with coral reefs which are among the world's most endangered marine ecosystems. Climate change has led to massive coral bleaching events with permanent consequences for local habitat.

Atlantic Green Turtle (Chelonia mydas)

The Atlantic green turtle is a herbivore eating sea grasses and algae. They tend to feed in low energy marine pastures. In some cases, green turtles migrate long distances between high

energy beaches used for nesting and foraging grounds. Human threats include: oil spills, live bottom smothering with sediments and drilling fluids, dredging, coastal development, agricultural and industrial pollution, oil spills, seagrass bed degradation, shrimp trawling and other fisheries, boat collisions, under water explosions, ingestion of marine debris, entanglement in marine debris, and poaching.

In U.S. Atlantic and Gulf of Mexico waters, green turtles are found in inshore and nearshore waters from Texas to Massachusetts, the U.S. Virgin Islands, and Puerto Rico. Important feeding areas in Florida include the Indian River Lagoon, the Florida Keys, Florida Bay, Homosassa, Crystal River, Cedar Key, and St. Joseph Bay. Critical habitat was designated in 1998 in coastal waters around Culebra Island, Puerto Rico.

Potential Effects of Discharges Authorized by the Reissued Permit

Whales

The reason for decline in numbers of most of the whale species is historic hunting. Hunting has ceased in the Gulf of Mexico and North Atlantic with the exception of a small amount of subsistence hunting for finback whales near Greenland.

As stated previously, existing threats to the endangered or threatened whale species include: entrapment or entanglement in fishing gear, collision with ships, habitat destruction such as dredging or sewer discharges, disturbance by vessels, acoustic and chemical pollution, military operations, and acoustic disturbance from ships, and aircraft. Issuance of the proposed permit and authorization of the discharges will not increase or decrease the potential effects of entanglement or entrapment in fishing gear or military operations. The other threats, which include: collision with ships, acoustic disturbance, habitat destruction, disturbance by vessels, and chemical pollution, can be indirectly associated with offshore oil and gas operations.

Chemical pollution is noted by the recovery plan for the finback and the blue whale as a threat to that species. Although the discharges which are proposed to be authorized will contain pollutants, sufficient controls will be required to protect the environment and mitigate potential effects on listed threatened or endangered whales.

Production in the Texas territorial seas consists mostly of natural gas, with very little oil being produced. Thus, produced water discharges are relatively low in volume. Out of eleven platforms permitted by the Railroad Commission of Texas to discharge produced water, four do not discharge. Four platforms discharge less than 50 barrels per day. The remaining three platforms discharge 240, 620, and 3885 barrels per day respectively. This is significantly less produced water than is discharged in the Outer Continental Shelf or the territorial seas of Louisiana. To date, there have been no significant adverse environmental impacts reported from outfalls in other areas of the Gulf. Platforms in the Texas territorial seas are also much less densely spaced than in the territorial seas of Louisiana. Thus there is expected to be significantly

less potential for impact from the produced water discharges proposed to be re-authorized in the Texas territorial seas than in other areas of the Gulf of Mexico.

Habitat destruction is a potential threat to several of the listed threatened or endangered whale species. Although actions such as dredge disposal are thought to have a more direct potential affect, the recovery plans for several of the species list oil and gas operations as a potential cause of habitat degradation, primarily due to ship traffic and acoustic disturbance. Since supply boat traffic is not expected to increase, the threat to listed whale species from collision with or disturbance from vessels is not expected to change as a result of the proposed re-authorization of the discharges. Although the overall load on supply boats may increase some as a result of operators being required to ship drilling fluids and cuttings to shore for disposal, there appears be sufficient capacity on boats presently serving offshore platforms. There is also very little drilling activity in the Texas territorial seas. Thus, ship traffic is not expected to increase as a result of this action. Re-authorization of the other discharges, such as produced water and deck drainage would in no way result in an increase in boat traffic. In addition, it appears that only rarely whales frequent the area covered by the Texas Territorial Seas General Permit.

Turtles

Many of the threats to listed threatened or endangered turtle species are related to activities in coastal areas and not oil; and gas operations. Those threats include: poaching of turtles and eggs, development and human encroachment of nesting beaches, erosion of beaches, vehicular traffic on beaches, beach armoring, artificial lighting, mechanical beach cleaning, marina and dock development, coastal development, increased human presence, dredging, non-native vegetation, seagrass bed degradation, and agricultural pollution.

Other threats which may occur in the area covered under the general permit, which are not related to oil and gas extraction facilities or the proposed discharges, are: entanglement at sea, commercial and recreational fisheries, and shrimp trawling. The discharges proposed to be authorized by the permit modification will not effect those threats to threatened or endangered turtle species.

Threats to the turtle species which could be related to oil and gas extraction activities in the area of coverage of the general permit include: vessel anchoring and groundings, underwater explosions such as explosive removal of old oil and gas platforms, oil development on live bottoms that disrupt or smother foraging grounds with sediments and drilling fluids, floating debris, oil spills, oil and tar discharged during pumping of bilges, industrial pollution, and boat collisions. None of these potential effects are expected to increase as a result of this permit action. The proposed prohibition of the discharge of drilling fluids and drill cuttings will eliminate the potential threat of disruption or smother of foraging grounds with sediments and drilling fluids. [3]

[3] U.S. Environmental Protection Agency, Ocean Discharge Criteria Evaluation for the NPDES General Permit for the Territorial Seas of the State of Texas, October 25, 2002.

Determination

When EPA Region 6 initiated section 7 consultations with the FWS and NMFS in 2003, EPA determined that discharges to be authorized by the reissued permit may affect but are unlikely to adversely affect the northern right whale (Eubalaena glacialis), blue whale (Balaenoptera musculus), finback whale (Balaenoptera physalus), sei whale (Balaenoptera borealis), humpback whale (Megaptera novaeangliae) and sperm whale (Physeter macrocephalus), Kemps ridley turtle (Lepidochelys kempii), loggerhead turtle (Caretta caretta), leatherback turtle (Dermochelys coriacea), hawksbill turtle (Eretmochelys imbricata), or green turtle (Chelonia mydas). Since the previous consultation occurred, no new species have been added to the federal list. This proposed permit reissuance does not relax any current permit conditions that may adversely affect the water quality of the Texas territory seas, rather it adds more monitoring requirements and fish/shellfish impingement/entrainment control measures. Therefore, EPA has determined that the reissuance of the Texas Territory Seas General Permit (TXG260000) has no adverse effect upon the 2003 ESA consultation baseline.

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